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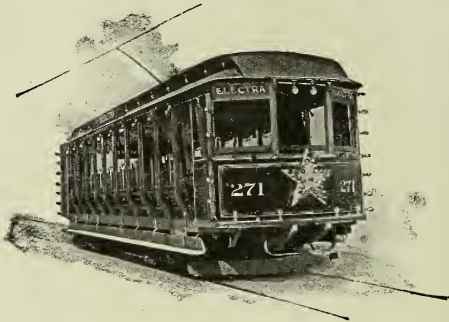
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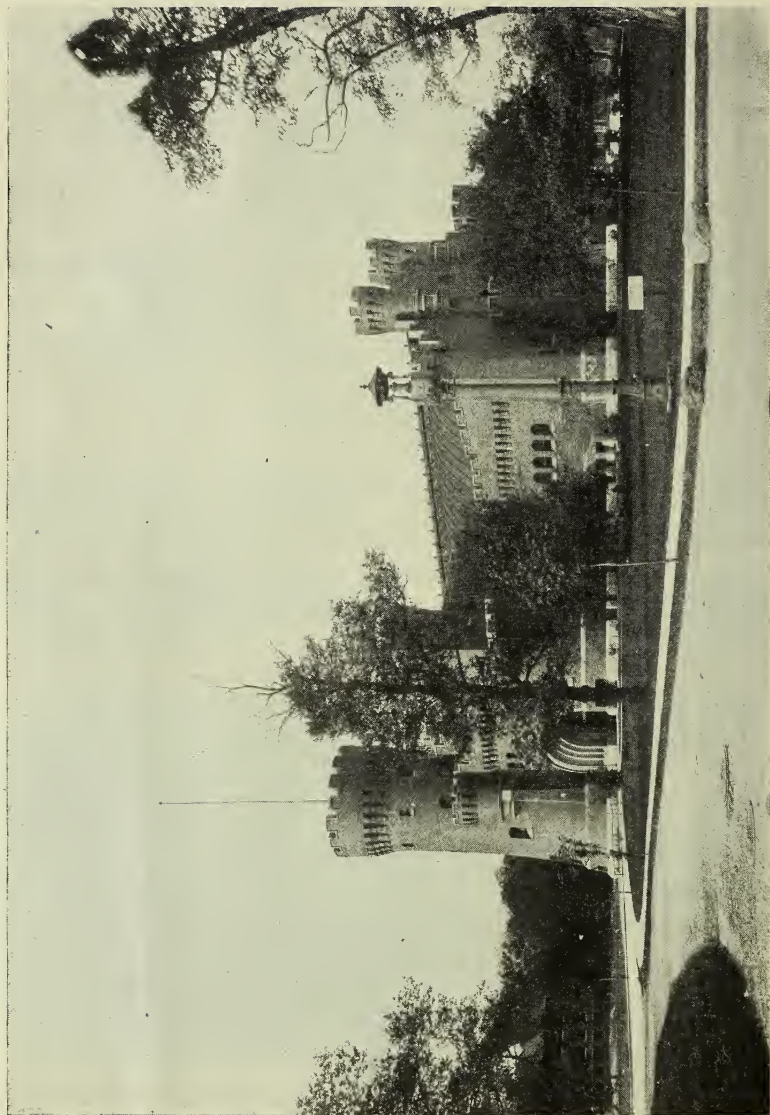
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EDITORIAL COMMENT

There is something radically wrong somewhere when the average wholesale price of dressed beef for the year is not over 6 1-4 cents per pound, and other commodities selling at their present rate. Yet this was the case during 1903, and on the Chicago market. The immediate cause must be evident to every one—supply in excess of demand. But the remote and real cause is that some of the European powers do not see fit to trade with us under the present tariff system. We sell annually \$150,000,000 worth of cattle to England. Suppose we had a few more such outlets as this; what then would be the price of cattle in America? Of course, if we reduce the rates on some of our imports, as, for example, cutlery, in order to secure a market for our cattle in Germany, the manufacturers of that commodity in America will object. We also want a better market for our grain, pork, etc. But the proper way to look at the question is this: Would it be better for the citizens of America as a whole if our manufacturers of certain articles were to sacrifice a small share of their profits in order to give an outlet to our live stock and other products? Is

the agriculturalist justified in demanding it, and would this make a more balanced condition of affairs generally? We can answer without the least hesitancy, "yes" to both of these questions.

Now Germany is perfectly willing to meet us half way, and in the interest of our farmers, stockfeeders, shippers and ranchmen, it is the duty of the United States to go the other half. In that memorable speech delivered at the Pan-American at Buffalo, just one day before his assassination, Wm. McKinley said: "The period of exclusiveness is past. The expansion of our trade and commerce is the pressing problem. Commercial wars are unprofitable. A policy of good will and friendly trade relations will prevent reprisals. Reciprocity treaties are in harmony with the spirit of the times; measures of retaliation are not. If, perchance, some of our tariffs are no longer needed, for revenue or to encourage and protect our industries at home, why should they not be employed to extend and promote our markets abroad." Seager, in speaking of this question in 1903, foretold present conditions exactly when he made this statement: "* * * if the temper evinced by the foreign press is any criterion, its (United States) troubles from this source are only just beginning." Now is the time for serious thought on the above statements of our Protectionist President.

The question naturally comes up as to how this commercial crisis can be obviated. Will it be by raising the Dingley duties 25 per cent., which measure Congress has already been considering? Hardly. Hon. Shelby M. Cullom, chairman of the committee on Foreign Relations, offers a solution to this problem: "It would be a simple matter to devise a maximum and minimum tariff which would not disturb business, which would not be an attack upon the protective prin-

ciple, but which would, in the long run, give us access to the markets of Germany and France, of which we are about to be deprived almost wholly." Mr. Cullom advocates the making of the present tariff the maximum, and a reduction of 25 per cent. the minimum; or 10 per cent. above the present rate for the maximum and 15 per cent. below for the minimum.

Because we have had prosperous times during the last few years under the present tariff system, let us not attribute the whole cause to this. Also, what proved to be a good thing several years ago does not necessarily apply to the case in hand. We must have some sort of reciprocity; otherwise, retaliation, as we are already beginning to find out, will be resorted to in earnest.

It is pretty hard to keep a good thing down. The Agricultural College of the Ohio State University has been looked upon with much favor in our own country for the last two or three years, but not until recently has it received such honorable mention abroad. A paper prepared by Professor C. S. Plumb entitled "Methods of Instruction in Animal Husbandry" (Zootechny) was read before the Second International Congress, Belgium, July 28 and 29, 1905. This has since been put out in pamphlet form and contains the various methods used in presenting this subject.

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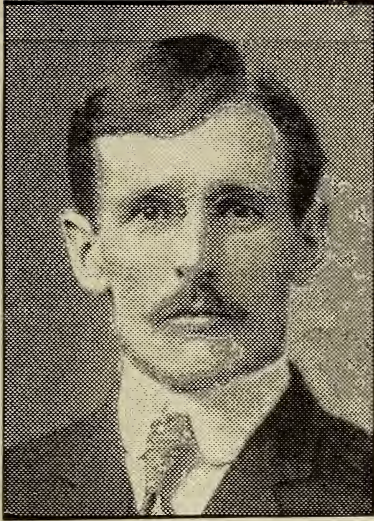
Monopoly is the best policy.

A good graft is rather to be chosen than great riches.

There's no tool like an old fool.

Don't kill the goose that buys the golden brick.

—Carolyn Wells, in Everybody's Magazine.



NEW PROFESSOR IN AGRONOMY

JAMES A. FOORD

(See February Issue Page 106)

Ohio Live Stock Association

The second annual meeting of the Ohio Live Stock Association was held in Townshend Hall, O. S. U., on February 14 and 15. O. E. Bradfute, the noted Poll Angus breeder, acted as chairman and Professor Plumb secretary.

On Wednesday morning, February 14, "The Carriage Horse" was ably presented by Dr. Carl W. Gay of the Animal Husbandry Department, and "A State Law for Stallion Supervision and Its Needs," by Mr. Charles McIntire, Cedarville, Ohio.

In the afternoon session, Mr. D. W. and Mr. W. A. Martin, a paper which appears elsewhere in this issue, "The Suggestions in Feeding Beef Cattle," and Mr. W. A. Martin, a paper on "The Shorthorn in Ohio and Its Influence." Professor J. H. Skinner of the Animal Husbandry Department, Purdue University, Indiana, lectured for a short time; subject, "The Economical Feeding of Swine."

Wednesday evening at 7:30 o'clock the meeting convened in the live stock judging room, Townshend Hall, where some work in judging steers took place. A class was made up of practical stockmen, outside the University, and dairy students.

The meeting was again called to order Thursday morning and the first speaker on the program was Mr. Hugh G. Van Pelt, now of the Hartman Stock Farm, and who was feeder of the Jersey herd at the Louisiana Purchase Exposition. Mr. Van Pelt's subject was, "Feeding Stuffs and Rations for the Dairy Cow." A paper, "A Plea in Behalf of Dual Purpose Cattle," was read by Mr. L. P. Sisson, Newark, Ohio, Secretary of the American Devon Cattle Club, and also improver of that breed of cattle. A general discussion followed this number on the now much-agitated question of "Should the Ohio Stockman Advocate International Reciprocity?"

The afternoon session was opened by H. P. Miller, Sunbury, Ohio; subject, "Problems in Breeding." Following, "The Live Stock Premium List of the American State Fair," by Professor C. S. Plumb of the Animal Husbandry Department, and finally, "The Foot and Shoe of the Horse," by Dr. D. S. White, Dean of the Veterinary College, Ohio State University.

The presiding officers were reelected for the ensuing year.

The Shorthorn in Ohio, and Its Influence

W. A. MARTIN.

One hundred and sixteen years ago Mr. John Patton brought the foreguard of the noble bovine improver into what was then the territory of Ohio. They were known as Patton's for years, and although not purebred animals, they and

their descendants exerted a profound influence in the cattle history of Southern Ohio. In 1803, the administrators of this estate sold the cattle at public auction, the first public sale of Shorthorn cattle ever held west of the Alleghenies, if, indeed not in the entire country. In 1829 Mr. S. S. Denney of Pickaway County purchased in Kentucky the show bull Duroc, and several cows. These were the first purebred Shorthorns ever introduced into the state. They were descendants of the Souder importation of 1817. The following year R. Seymour purchased in Wisconsin a bull and five cows, said to be the first in the state. About the same time Governor Trimble purchased in Kentucky the show bull Exchange. Moser Felix and George Renick of Ross County, and Mr. Miller of Pickaway were among the first men of the state to breed up a really good herd of what was then known as the English breed. The breeding of improved cattle was greatly stimulated when, in 1805, Mr. George Renick drove overland to Baltimore sixty-eight head of cattle. This opened up a market and thereafter for many years Ohio cattle were driven to Baltimore, Philadelphia, and New York. Even in these early days Ohio had several large feeders. Mr. R. Seymour fed from 100 to 700 head per year, and in 1841 drove 840 head overland to the Philadelphia market.

The soil of Southern Ohio was mostly adapted to the production of cows and blue grass. The farms of first entry were large and cattle feeding was not only very profitable but also fashionable. Intense rivalry existed between feeders on opposite sides of the Ohio. Kentucky was, through the excellence of the Dun cattle, for the time being on top. But men of similar blood and equal pride in their herds lived across the river. They

had too the land, the brains and capital to defend their position in the cattle trade, and they were men of action. Indeed at this very time they were taking steps to form the memorable Ohio Importing Company, which company when the enormous difficulties of the undertaking, the character of the stock and the influence on all subsequent cattle history in the west is considered, surely stands in a class by itself. Other importing companies have accomplished much good, but the Ohio Importing Company had the superlative excellence of all of them, and with the exception of two men it was an Ohio enterprise entire.

It is interesting, in view of the recent color agitation, to note that Mr. Renick wrote of the Powell cattle of Philadelphia, that they were red, white, red and white, and the fashionable roan. These pioneer cattlemen were sticklers for genuine merit in place of fashionable breeding. They demanded constitution in place of fancy colored muzzles. Form, quality and feeding ability they must have or they will not be well received here, write Mr. Renick in 1837. And indeed well might they make utility the prime requisite. For, consider the hardships these cattle were forced to undergo. Shipped by slow-going sailboats to New York, by way of the Hudson and Erie Canal to Buffalo, a lake barge to Cleveland, and then they were driven overland across the state. Not only must they start for this treatment, but their progeny must be able to stand the trip over the mountains to market. Is it any wonder that cattle which could stand such treatment and flourish would leave their impress very strongly upon their progeny? Sometimes it seems to me that our modern show cow would look like a society belle compared with her noble progeni-

tor. But time has wrought wonderful changes and the same charge might be brought against the present generation as compared with their grandparents.

Monetary values represent only comparative values. Times were very prosperous, the currency being inflated when the Ohio Importing Company held their sales. The venture appeared to have terminated very successfully from a financial standpoint, but the majority of the stockholders took their original investment and profits in high-priced cattle. To quote from Felix Renick: "We have higher views than of immediately realizing a little profit, provided it could be done. The object was first conceived and has so far been carried out for the good of the country. Whether the project has been well or poorly executed is not for us to say." It is indeed difficult to overestimate the influence of this company's work. Not only did it give to the west the Young Money's, Rose of Sharon, Young Phyllis and Josephine, but supplied crosses of fresh blood to the herds derived from the earlier importation. The entire industry felt the quickening touch and in later years the full fruition of the fondest hopes of the company were more than realized. Several other importing companies were formed in the early 50's. The Madison, Clarke, Clinton, Darby Plains, Scioto, and Shoppers, also several companies were formed to bring in cattle from countries where they were breeding better stock. Tuscarawas and Loraine had such companies. They handled in the main good cattle.

Not only did Ohio lead in the introduction of the best England afforded, but among the very first Scotch cattle imported came to Ohio. In 1854 the Shoppers of Union City, Warren County, imported six head, purchased of James Douglass, Athelestoneford, Scotland.

They must have been up to the Scotch standard, as two of the number landed in this country cost \$1500 apiece.

The Shorthorn breeding business has witnessed many hard bumps and celebrated many triumphs during its 116 years in Ohio. By tabulating the results of the public sales in Ohio I find five distinct periods of prosperity—in 1837-50-70-82-83, 1900. But I do not wish to insinuate for a moment that I do not believe that the breeder of purebred Shorthorn cattle does not make money every year. Now I do not mean the pedigree speculator but the legitimate breeder. I was somewhat astonished at the average for all the sales reported for Ohio since 1837. Of course, this does not truly represent the sale average of all cattle sold, for as a rule it is the better class of sales that are reported. I exhausted all the literature in the University library, and am quite certain that I have practically all the sales ever reported in the state.

I found 66 sales, at which 2689 head of cattle sold for \$662,654, a good average of \$243.71 per head. This surely is a good average, but it simply shows what the people of Ohio have thought of the noble breed in the past. We have had two sales where the average was over \$1000 per head. The second sale of the Ohio Importing Company was in 1837, when they sold 15 head for an average of \$1072, and in 1852 the Scioto Valley Importing Company sold 16 head for an average of \$1367. We have had six sales, selling 178 head with an average of better than \$500. Probably the most noted of these was Mr. Dan McWilliam's in 1870, at Xenia, Greene County, where he sold 71 head at an average of \$864.61. Of the entire 66 sales but six had an average below \$100. The lowest sale average I could find on record by any Ohio breeder held in Ohio was \$73.25. During the present period of prosperity Ohio

breeders have been to the very front in the contest against the scrub. Messrs. Gerlaugh, Kelly and Wood, besides a host of others, have been making Shorthorn history for the Buckeye State during the past six years.

You all know that the gentlemen I just named have had some very successful sales, but perhaps you do not remember just how successful. In 1899 they started a series of spring sales which soon became known all over the country as the Ohio circuit. The averages follow:

C. S. Gerlaugh—Four sales, 127 head sold for an average of \$421.85.

C. S. Kelly—Three sales, 112 head sold for an average of \$414.75.

W. I. Wood—Five sales, 221 head sold for an average of \$241.33.

As long as Ohio can offer to the public cattle which will command such support as this, we need not fear for her position in the trade.

Now for a few words in regard to the influence of the greatest livestock improver Ohio has ever known—the Shorthorn bull. I know that some will not agree. They will point to the draft stallion, the Poland China, etc. But the Shorthorn sire preëmpted the ground he won, established in his conquest over better beef and more milk long before his first competitor appeared. He had made the former feeders of the Scioto and Ohio Valleys thousands of dollars before the Darby Plains Improvement Company in '57 imported the first draft stallion into the state. For 67 long years before, he had prospered and waxed strong and never since has he lost ground or his popularity waned. They tell us that the sturdy white face is driving the Shorthorn sire off the range, that the ro-tund doddie is fighting him to the last ditch for corn belt appreciation, and that

in the great show rings no honors fall to his bullocks. But we Ohio farmers still pin our faith in the same old time undiminished quality of the grandest bovine on earth. Their wonderful adaptability, docility and intrinsic merit have won for them enduring champions. That is why there are 1400 different men breeding purebred Shorthorns in Ohio today. And the number of farmers breeding Shorthorn grades is nearly as large as the number of farmers endeavoring to improve their cattle.

For excepting the strictly dairy breeds and some few Angus and still fewer Herefords, it is the Shorthorn which is doing the improving today.

And the Ohio Shorthorn is not lost when he gets into fast company. For who has not heard of the winnings of Hanna, Wood, the Gerlaughs, Kelly, Ross, Hintz and many others?

But, gentlemen, one thing remains to be done, the doing of which is imperative to promote the greatest influence of the Shorthorn. That is to produce more steers, purebred steers. And if there is to be a Shorthorn champion at the International, why shall he not come from Ohio?

The Bureau of Forestry at Washington has been studying the maple sugar industry with the view of securing a larger use of the maple forests. In many sections the trees have been cut for timber purposes, thus reducing the opportunity for tree tapping. The bureau has secured much valuable data in regard to the business, and definite instructions for the management of these lands can now be furnished. At present, Ohio, New York and Vermont are the largest producers of maple sugar products.

A Visit From the Agricultural Department, Washington, D. C.

A bulletin of twenty-four pages has recently been published by Professor Graham. This bulletin is devoted wholly to agricultural extension work. Ten thousand copies have been sent out over the State, thereby giving information to the many rural schools and farmers' organizations concerning this movement. Professor Graham's work along this line has undoubtedly been appreciated, and we will be safe in saying that Ohio leads in the elementary agricultural education in the schools. The Secretary of Agriculture has been interested to such a degree that he has sent an investigator, Mr. Knorr, to find out what developments have taken place, in order that the government may assist in any way that may bring about good results. The proposition that the centralized schools own farming land adjacent to the buildings for experimental purposes has already been carefully considered, and it is only a matter of time until such conditions exist in Ohio.

City Shade Trees

JOSEPH H. GOURLEY.

As our attention is being frequently called to the development in the line of forestry, we might glance at some of the members of the forest which have been claimed for cultivation and domestication. Not all trees would respond to the needs of a city shade tree, and many of them we would not want.

We want trees which will give us shade, grow fairly rapidly, make the best possible appearance, and withstand so far as possible the abuses which they will receive in the midst of our city life. There are other requisites which would be required by individual taste and local conditions. This seems a good deal to require of a tree, but many of them give us all these things.

In noticing the shade trees of most of our cities it would seem that "the line of least resistance" is being followed quite constantly. We see streets lined with the cottonwood, *populus deltoides*, which should have been made beautiful



TOWNSHEND HALL—OHIO STATE UNIVERSITY

by graceful specimens of the arborial world. About the only thing that can be said in favor of the cottonwood is that it grows very rapidly and gives the pruner frequent employment. But most of them are awkward looking and are generally pruned till they lose all the beauty of a tree.

Cities often vary widely in the trees which predominate on their streets. In one place we find mostly elms, in another maples, and so on. Not long since in observing the trees in an Ohio town, we noticed that they were somewhat peculiar. The prevailing species were *Catalpa catalpa* and *C. speciosa*. *C. speciosa* makes a very pretty tree. It is rather peculiar and different from the native forest trees, which are usually seen predominating. Its shape is good, and affords a very good shade. Being quite free from the attacks of insects, it might be recommended for planting along some of our city streets.

C. catalpa will not answer our purpose nearly so well. It has a straggly shape, with open branching, which affords less shade and presents an ungraceful appearance. This species of *catalpa* is attacked quite seriously by a fungus on the leaf. From observations it seems to be much worse on this species than *speciosa*.

In general the *catalpas* deserve a place among our ornamental trees from the beautiful blossoms which they bear quite late in the spring, after most of the other trees have lost their bloom. They come in large, white clusters, although on close examination we find the corollas to be spotted with purple and gold. This tree is one of the highest in our classification.

Another very prominent tree found in this same city was the linden, *Tilia Americana*. Entire streets were lined with them, and they were also found on

many lawns. Also many ash trees, principally the white ash, were growing on the streets and lawns. The elms were not very abundant, only one short street, where this most beautiful of American trees held full sway. Not only for the beauty, but for its long life, the elm should be, in our opinion, the shade tree of American cities. Serious trouble has arisen in the eastern cities with the imported elm leaf-beetle, *Galerucella luteola* Mull, which threatens the destruction of the elms. The government will well spend what appropriations it gives for the extermination of this pest. We find the white, red and English elm planted, but the white, *Ulmus Americana*, is the most satisfactory in every way for our purpose.

Our old friend, the maple, was also found to be quite abundant in this locality. The black, sugar, silver, red and Norway maples greet us in nearly every city. Which of these types will we choose for our streets? Possibly the foreigner, Norway maple, is the most satisfactory. It has generally a perfectly symmetrical contour, large green leaves, and holds its foliage longer in the fall than any of our maples. The beautiful colors which we admire in the fall surely predominate in our native maples, especially the red, but this is not the primary purpose of a city shade tree. The silver maple is often considered the best; it grows rapidly and looks well, but is quite brittle and cannot stand heavy storms, and will not give the length of service that the other will.

The magnolias were occasionally seen along the streets and lawns, and they always carry with them a certain majestic, independent air, which reminds us of their home in the forest.

There are many other trees which deserve mention, and can be recommended for city planting, as some of the birches

and pines. We should not lose sight of the importance of the trees in giving homes to our birds, but should by this means encourage their residence among us.

In many cities the natural gas has seriously affected the trees planted near the curbing. In one city this poisoning was noticed for about three or four blocks along one street. It brought out a rather interesting fact in regard to the ability of various trees to withstand this poison. The gas main lay in the middle of the street, two and one-half feet deep. The street was covered with asphalt.

The first notice of injury was in the summer of 1904, when all the maple trees died quite rapidly on the north side of the street. A young elm, which was still living September, 1905, was very much dwarfed and out of shape, showing a lack of nourishment and some effects of the poison. The maples have been replaced by cottonwoods, which are growing and doing very well.

On the south side of the street it was found that the maples died first, while the *C. catalpa*, which seemed dead in the spring of 1905, put forth a few shoots at the base of the tree, and at the tips of the branches in early summer.

A boxelder standing in the middle of the row of injured trees, was almost unaffected. The leaves were a little small and not a very good green, but it gives no signs of dying.

The amount of gas in the ground along this street can be imagined by stating that the boys drive sticks down into the grass plot next the curbing and at times can light the gas which comes up. One man said he did this himself occasionally to prevent the gas from entering his cellar. The grass plot, however, was not affected, but was in a good, growing condition.

Nature gives to every time and season some beauties of its own; and from morning to night, as from the cradle to the grave, is but a succession of changes so gentle and easy that we can scarcely mark their progress.—Dickens.

Constitution and By-Laws of the Ohio Plant Breeders Association

ARTICLE I—NAME.

The name of the organization shall be the Ohio Plant Breeders Association.

ARTICLE II.—PURPOSES.

The purposes of this association shall be to encourage the improvement of plants and to provide an official record for breeders who are giving special attention to this work.

ARTICLE III—MEMBERSHIP.

The membership shall consist of annual members, life members and recording members.

Any person who is interested in the objects of this association may become an annual member by election and by the payment of the prescribed annual fee. Annual members who pay a fee of twenty dollars will be classed as life members, and will be exempt from the regular annual fee.

The recording membership shall be confined to such annual or life members as are conducting plant breeding work that is eligible to entry on the association records. Any recording member who fails for a period of twelve months to undertake breeding work that is eligible to entry on the association records will cease to be a recording member.

ARTICLE IV—ORGANIZATION.

The officers shall be a President, a Vice-President, a Secretary and a Treasurer. There shall be a Council consisting of seven recording members. This

Council shall be selected by the committee on permanent organization at the first meeting of the association, but thereafter the Council shall be elected annually by ballot by the recording members. The Council shall organize by electing a Chairman and a Recording Secretary.

ARTICLE V—COUNCIL.

The Council shall have exclusive control of the breeding work of the association, shall pass upon the eligibility of the breeding work to record. Every action of the Council must be submitted by letter to the recording members by the Recording Secretary within thirty days after such action is taken and may be nullified by a majority negative vote within thirty days after such notice is mailed by the Recording Secretary.

ARTICLE VI—MEETINGS.

There shall be semi-annual meetings of the association each year. The exact time and place of semi-annual or called meetings shall be determined by the President and Chairman of the Council.

ARTICLE VII—ELECTIONS.

The election of officers and Council for the ensuing year shall be held upon the last day of the regular winter meeting. Annual members may be elected at any meeting.

ARTICLE VIII—AMENDMENTS.

Amendments to the constitution may be made by a majority of the Council with the concurrence of two-thirds of the members of the association who may vote upon the question by mail within thirty days after notice is mailed by the secretary, providing the amendment has been discussed at the previous semi-annual meeting.

BY-LAWS.

SECTION I—PRIVILEGES OF MEMBERS.

All classes of members shall be entitled to vote upon all matters of the

association excepting those placed under the control of the recording members by the constitution.

L SECTION II—DUES. L

The annual dues of all members, except life members, shall be one dollar per year, payable upon notification of election and annually thereafter. Recording members will be required to pay fees for certificates of transfer, etc., as may be determined by the Council, in addition to the regular annual or life fee. A member in arrears of dues or fees for more than one year shall cease to be an active member, but may be restored to membership, without action of the association, by the payment of all arrears.

SECTION III—FINANCES.

All fees from life members and recording members shall be devoted to the expenses of the record work exclusively.

SECTION IV—OFFICERS.

The several officers shall perform such duties as are ordinarily required of such officers, and shall serve until their successors are elected and installed.

The President shall call all meetings of the association, shall preside at all meetings, and shall deliver an annual address.

The Vice-President shall preside in the absence of the President.

The Secretary shall keep the records of the meetings of the association and perform such other duties as may be delegated to him by the association or the President.

The Treasurer shall receive and hold all moneys of the association. He shall pay out the funds that are to be devoted to the record work upon the order of the Chairman of the Council, and all other funds upon the order of the President.

The Council shall meet upon the call of the Chairman; and five members,

present or voting by mail, shall constitute a quorum. A majority vote shall determine all questions.

SECTION V—AMENDMENTS.

Amendments to the by-laws of the association may be made by a majority vote of the association at any regular semi-annual meeting.

Live Stock Conditions of Hardin County

F. D. HECKATHORN.

Hardin county lies in the north-western part of the State, about sixty miles from Columbus and seventy miles from Toledo. There is a watershed or ridge running through this county. The waters north of the ridge flow to Lake Erie, and the waters south of it flow to the Scioto and thence to the Ohio, and finally to the Mississippi. The county is well adapted for the raising of live stock. The ground is fairly productive and can be well drained, as there are good outlets on both sides of this ridge. The crops, as corn, oats and hay, which are necessary for live stock production, can be grown with good yields. Many of the farmers are raising millet, sorghum and alfalfa for the purpose of feeding, especially for fattening cattle. Alfalfa seems to answer the purpose of putting on fat quickly and keeping the stock in good growing condition.

Hardin county is not near to any good markets. The most of the stock shipped goes to Pittsburg, Buffalo and Cleveland. The railroad rates for shipping take up much of the profits, but Toledo bids fair to offer a good market in the future, as a large packing house opened up there last spring. As Toledo is only seventy miles from the shipping points, the rates would not be very high, and the buyers could afford to pay more for the stock. Then, too, the stock would only be on

the train two or three hours, and they would not lose in weight to any appreciable amount.

At the present time there are more cattle and hogs raised than any other kind of live stock. During the past few years, there have been in this locality several good breeders of pure-bred cattle. These men have not achieved a national reputation, but they should be given credit for having bettered the cattle in their respective communities, as they have undoubtedly done. The Shorthorns have been the most popular and have been raised to a greater extent than any other breed of cattle.

At the present time there are several new herds starting, and they bid fair to give a good account of themselves in the future. The Herefords, Polled Durham and Aberdeen Angus have been introduced, and certainly ought to prove all right, as the country is as well adapted to them as it is to the Shorthornss. Now there are eight or nine breeders of pure-bred stock in Hardin county. The farmers who are not breeders of pure-bred stock are gradually grading their cattle up, so that the conditions of cattle in general are much improved over that of a few years ago.

There are several good feeders in Hardin county, and they not only secure all the good prospective feeders in their neighborhood, but in the last four or five years they have sent West for young stock to feed. This stock is brought in from the Union Stock Yards at Chicago and also from farther West. This fall there were some calves brought from Texas. The grade Shorthorns and Herefords seem to be the most desirable for feeding purposes. This stock is bought in the fall, fed through the winter and sold the next summer or fall. A man must not pay more than the cattle are worth, and also must understand just what to feed

and how to feed them in order to bring about the desired marketable stock in the quickest time. There is money in it, if a man has the feed and understands the business.

The horses are not what they ought to be. This is due to the fact that there are only two or three breeders in the county. The farmers are not willing to put up the necessary amount of money to secure a first-class female of any breed for breeding purposes. There are four or five men who keep stallions, some of which are good horses, but as the mares bred to them are mostly scrubs, it is next to impossible to get a high-class marketable colt. Most of the stallions are black and gray Percherons, but there are also some good road stallions. It would pay the farmers to mate good females with good males and raise good colts. Blood always shows, and it takes no more feed and very little more trouble to raise a good horse than it does to raise an inferior one.

Every year horses from Texas and other parts of the West are shipped into the county. These horses, as a rule, are small, tough and wiry, and will do considerable work, but they are wild at first, and some of them can never be trusted. However, they come cheap, and as they do the work, they answer the requirements for some farmers.

There is probably more money made from hogs than any other kind of live stock at the present time. This is due to the fact that hogs mature quickly and the feeder realizes an early return on his investment. They are always sold to buyers at the place of shipment, unless the owner has enough to make a carload. The owner or seller receives about forty cents per hundredweight less than they are quoted in the city markets. Most of the hogs raised in the county are Poland-Chinas, and they are preferred because

they mature quickly and acquire a good size. The chief objection to them is their tendency to produce small litters. The Chester Whites, Duroc Jerseys and Berkshires are also raised, but they are not as popular as the Poland Chinas.

There are five or six breeders of pure-bred hogs in the county. These men are certainly making a success in selling breeding males and females, as the farmers are discovering that it pays to have good blood.

During the first part of the last decade the sheep industry suffered a decline, and hence were not raised to any large extent. But in the last five or six years the farmers have begun to pick up a good bunch of sheep wherever they could get them at a reasonable price. Now there is much money made from this source.

The Merinos and Rambouillets are the most popular, while there are some Lincolns also raised. These breeds of sheep seem to stand the changes in climate better than the Shropshires and some of the other breeds.

At the present time there is certainly a bright outlook for the live stock interests of Hardin county.

Breeding the Farm Horse

S. H. SHAWHAN.

The prediction, made several years ago, upon the appearance of the automobile that it would in a decade or two almost drive the horse off the face of the earth, seems even less likely, at the present time, to be realized than when the prediction was made; for good horses of all classes were never in greater demand, and the prices were never higher. Notice that the adjective "good" is used, for it does not include chunks, plugs and other specimens of the equine race that must be classed as horses, and which are all too common on many farms.

Too many farmers consider the horse only as a part of their general farm equipment, looking upon him much in the same light as upon a piece of machinery; he is merely an aid in general farm practices, instead of an investment.

As two or more horses must be kept on every farm, it is just as easy to keep one or more brood mares, which will do nearly the same amount of work, and eat little more than a gelding of the same breed: while at the same time they will be bringing in an income which will vary, of course, with the quality and finish of the animal raised.

Having decided that we wish to raise horses, the next and paramount question which farmers all over this land are considering, is the kind which we shall breed. Here we find "many men of many minds," including those who advocate the draft horse, the light harness horse, the heavy harness horse, the thoroughbred, the hunter, etc. For each of the above types we find many supporters, and each will tell you his chosen breed is the best, which is usually true for this individual at least, as a man will always take more interest in his favorite breed. We must, however, keep continually in mind that the mares we are to breed must also be able to do the general farm work.

Many prefer some type of the light or heavy harness horse, probably more often the former, and while many make a success, the reverse, for different reasons, is also true. In the first place, the mares used cannot be very large, averaging all the way from 950 to 1,200 pounds; if larger mares are used, the breeder must depend upon the sire to breed light enough for good road horses, and the mating in such cases is not always successful. Then, again, when a man is breeding the light harness horse, the temptation is very strong to try to raise race-horses, which art the average farm-

er does not understand, and consequently often loses money thereby. This brings to mind the fact that most farmers do not understand how to break a horse properly in order to get the best possible gait and action which a driving horse must have to command a high price. This gait and action the professional horse dealer secures in a short time, and sells the animal at a good round sum, often doubling his money, which money the farmer could just as well have had if he had but understood his business.

If the lighter horse is not altogether suited from which to derive the largest income, what, then, shall we breed? The answer is, the heavy draft horse. Here, again, arises the question, which breed—Percheron, Clydesdale, Shire or Belgian—will be the most profitable? And the answer is much the same as before: breed the one that is best liked, and it might be also added the one that is most convenient from which to secure good stock. While it is not possible, nor often even advisable, to secure pure-bred stock with which to begin, the mares should be high grades, so that it is only a question of a few generations until the stock is practically pure bred.

To get the best results in the shortest time a pure-bred sire of the same breed as the preponderance of blood in the mares (which in most parts of Ohio is undoubtedly Percheron) should be used. But some may say that a 2000-pound horse is too large and heavy for general farm work, and on many farms this may be true. To remedy this, the mares, in most cases, need not weigh over 1400 or 1500 pounds, and the produce are of a very acceptable size, being small enough for the work desired, and yet large enough to bred to a larger sire. By breeding such mares to a stallion weighing not less than 2000 pounds, the progeny will weigh somewhere near 1650 or

1800 pounds, which, if of a high class, are heavy enough to bring high prices in any market.

One decided advantage of the heavy draft horse over the harness horse is that they can be worked much younger, being able to stand light work at two years of age, and if judiciously used, may perform heavy work at three, thus being able to pay for their keep and at the same time be growing into money. If the draft colt happens to become blemished in any way, if not too serious, it does not have so marked an effect upon the price paid when the animal is put under the hammer, while a driving horse with the same blemish would be practically unsaleable.

While the other draft breeds are not represented to any great extent in the State, Ohio is particularly fortunate in having several large firms of both importers and breeders of the Percheron horse, so that his friends and admirers have a very choice class of animals from which to select their breeding stock.

Possibly a word should be said about the outlook for the mule. Many farmers assert that there is more money in raising mules than horses, and give good reasons to prove their statements. While a too rough, raw-boned mare should not be used for breeding mules, it is not as necessary for her to be as smooth and to have as good action as when used for breeding horses. The mule matures young, can be put on the market at an early age, and if of a high class, a good price can always be secured.

But the farmer may say, what shall I drive? The heavy draft horse is too large, and I won't drive a mule. He can not be blamed for this, and should by all means keep a horse suitable for driving, for no one deserves a good driving horse better than the farmer. If the horse is

not too small, he may be used for the third horse in busy times, and thus pay for his keep, besides the satisfaction to the farmer of owning a good road horse.

What farmer, really loving rural life, who, performing his farm work with a good, strong team of Percherons, and when he wishes to do an errand or drive to town, gets in behind a neat, mannerly horse full of life and action, would be willing to change places with any of the professional or business men of our large cities?

Many men do not allow their principles to take root, but pull them up every now and then, as children do flowers they have planted, to see if they are growing.
—Longfellow.

Carnival

A Carnival of Sports is to be held in the armory on April 6. The proceeds of this carnival are to go to the athletic board. Committees representing the faculty, athletic department, boarding clubs, fraternities and sororities, glee club and strollers, literary and technical societies and the Y. M. C. A. and Y. W. C. A., have been appointed to make arrangements.

The first of the championship basketball series was played Feb. 3 at Oberlin, Ohio. Score: Oberlin, 31; O. S. U., 8. The day before, Ohio State defeated Akron by the close score of 20 to 17.

Order is the sanity of the mind, the health to the body, the peace of the city, the security of the state. As the beams to a house, as the bones to the microcosm of man, so is order to all things.—Southey.



F. Detmers, del

"GAY MONARCH OF THE FIELDS"

Transformations—(a) egg, (b) larva, (c) chrysalis, (d) chrysalis in more advanced stage, (e) and (f) adult.

Facts About Clover for the Ohio Farmer

S. B. STOWE.

At the present time farmers throughout the state understand the value and need of a leguminous crop. To answer this need red clover has been sown more than any other single one of the family of legumes. From this it is very evident that there must be something about this plant that suits them in some particular way. There are several reasons for this, and it may not be amiss to enumerate some of them briefly that we may understand a little better the cause of its popularity.

It is an easy crop to grow in most sections. The general method of seeding is nothing more than broadcasting, either by machine or by hand. This as a rule is done in early spring, the average time for the state being March 27th. The seed sprouts and there the tiny plants grow slowly until the wheat is harvested, and if the season is good, the growth that the plant makes during the summer is marvelous. On farms in southern Ohio seed has been cut the first summer of the plant's life. Of course the yield was not large, but the usual price justifies the gathering of every pound. As a rule, clover goes through the winter well, and when spring opens up, the growing field is good to behold. So far it has not cost a cent, only for seed, and at the same time the farmer is assured that much nitrogen is being added to his soil. According to the average results of sixteen experiment stations, the amount reaches 122 pounds per acre, and at fifteen cents per pound its value is easily understood.

Just at this place, and before taking up its value as a feed, every farmer that grows clover is well pleased with the rotation of crops that he is able to establish in connection with this plant. No cultivation is necessary as with soy beans or cowpeas; there is no idle ground or extra

work, only the cutting and harvesting with ordinary machinery. The time for cutting comes when the corn crop is far enough along that it does not need constant attention, and it may be finished before wheat harvest. The seed also is ready to cut before corn harvest. Thus we have an admirable rotation with the growing crops, and the harvesting of the same, as well; a point that means much in this day of scarcity of farm help.

No attempt will be made to discuss the methods of securing the hay, but it is understood that this is cut when in its prime; that is, in full bloom. Its value to a dairy man or stock man is hard to overestimate. Large amounts of nitrogen, stored up in its tissues in the form of protein, makes it one of the cheapest concentrates known. For young and growing stock it cannot be equaled, or at least never has in any feeding experiment. As a feed for horses prominent agriculturalists in the state claim that no other feed is necessary during the idle winter season, and several practiced that method with success. A man with a barn full of hay and a lot full of steers, has a keen feeling of satisfaction, for the scientists have told him that he has the prize already secured. But perhaps these statements are wasted, as we have never found a farmer that did not place a high value upon clover hay for feed and for manure.

This brings up the question of the manurial value of clover. Let us examine its fertilizing value as brought out by analysis: The value of the nitrogen in a ton of clover is \$5.70; of the phosphoric acid, 54 cents, and of the potash, \$1.31, making a total of \$7.55 per ton. Now, it has been estimated that in feeding dairy cows, not more than 20 per cent. of the fertilizing value is used up. This, then, would insure a fertilizing value of the manure secured from a ton

of hay, as being not less than \$6, the greater portion of which has come from the air. On an average an acre yields a ton and one-half of cured hay, and this would make a manurial value of \$9 for the first crop. The second growth comes right on and may be plowed under for green manuring or cut for seed. It is seldom that less than five dollars an acre are secured for seed; indeed, it is more often ten or fifteen dollars where careful, up-to-date methods are used. And after this, there is a large pile of clover hulf that may be returned to the field.

This is in brief one method of handling the crop, and there are still many others. The hog producers of our State always endeavor to have a clover pasture for summer. Pigs feeding upon clover always have a good bone and a framework capable of taking on fat very rapidly when the period for receiving concentrates arrives. The gains per day with corn and clover surpass by far those made in the lot upon the same amount of concentrated food. Station records as to the yield of clover in this way have not as yet been made very fully, and it would certainly be a splendid field for experiment. This, however, without doubt is a very cheap and profitable way of increasing the fertility of the land, as we understand by this method that no handling of the crop is necessary. It is regarded by some as being wasteful, but it is difficult to see that the value to the hog would be less than 20 per cent., which is the amount the dairymen gets after all his work.

Finally, we must conclude that the farmer has good reasons for being suited with a clover crop. It means dollars, in the form of added fertility, in amounts received for meat or milk, and from seed. In this crop perhaps more than any other does the Ohio farmer have an

opportunity to restore some of the lost fertility. It cannot be other than a boon for the farmer. It has been tried and has proved and established its merits; and may we never abandon this crop that suits diversified farming so admirably.

Tobacco

F. E. BEAR.

Coming from a county and a farm where tobacco is the chief product, I find it more easy to write on this subject than any other. I hesitate somewhat in taking this as my subject, from the fact that people who have not had the fortune or misfortune to be reared in a section of this kind, look upon the production of tobacco as a disgrace to an American farmer. Yet it is a product of great economic importance in various sections of the United States, and has been developed in these sections many times to the almost entire neglect of other farm products.

In sections of this kind but few farmers are engaged in the production of live stock to any great extent, but vast fields are planted in tobacco, and many farmers grow nothing else, depending on some larger farmer for food stuffs. In the community from which I come, we have but few pure-bred horses, cattle or hogs, and I know of but three flocks of sheep in that section. But every farmer has from ten to thirty acres of tobacco, and I have seen fields with as much as seventy acres covered with a most beautiful growth of this plant. To my eye there is no prettier crop.

Where tobacco is raised to such an extent, it requires much the same kind of labor as corn, with the exception that the seed is not drilled in the rows, but plants, having been previously grown in beds, under cover, are transplanted. Formerly this was done by hand, and only after

a rain, but now we plant in the driest of weather. A machine carrying a barrel of water, two planters, and a driver, can transplant from three to four acres per day. To the barrel of water is attached a hose, and to the end of this a valve, which is opened by a knocker on the wheel, and closed again by a spring.

Ashoe much like that on a corn planter opens out a furrow, the valve is opened every twenty or twenty-two inches, one of the planters puts in a plant, and the steels packers pull the dirt back again to the plant, which had been thrown by the shoe.

The three chief varieties of tobacco grown in our section are Spanish, Dutch, and Seed. These grades are all used as filler grades in cigars. Havana tobacco is also used as a filler. Some Seed is used as a binder, and the cigar wrappers are made from Connecticut Seed and Sumatra. Plug tobacco is made from White Burley. The trash grade is made up into scrap tobacco, such as Mail Pouch, etc.

As to yields, they vary considerably with the weather conditions. Spanish averages about 800 to 850 pounds per acre; Dutch, 1000 pounds, and Seed, 1400 pounds. Prices vary, with an average of 8 to 9 cents per pound for Spanish, 7 to 7 1-2 cents for Dutch, and 5 to 6 cents for Seed. The general average is about the same per acre for each. If one variety brings a larger price one year, more farmers raise that variety the next, and the price is lowered accordingly.

Much comment is heard on the supposition that tobacco impoverishes the land, but we have not found that to be true. We can produce as great or greater yields now as ever, and the wheat and clover following in rotation after tobacco are much better than after corn, with but very little, if any, difference in the amount of fertilizers or manure used on each. For, if we do use perhaps a little

more fertilizer on the tobacco in the spring, we use more on the corn ground in the fall in sowing the wheat.

University News

The baseball schedule for the coming season is as follows:

April 18—Otterbein.
 April 21—Wittenberg.
 April 24—Capital University.
 April 28—Trip West.
 May 5—Wooster.
 May 12—Still open.
 May 19—Kenyon at Gambier.
 May 22—Indiana.
 May 26—Northern trip.
 June 2—Kenyon.
 June 8—Case.
 June 9—Oberlin.

A new course has just been added to that already in vogue in the Horticultural Department. This new course is Apiculture. It will be under the supervision of Professor Lazenby, and will deal with the practical side of the problem.

Fissdoer and Carrol, a firm of New York City, purchased the team of black geldings of the University for \$450. This firm sold over 36,000 head of horses in public and private sales in the past year.

Mr. R. J. Corry, a Poll Angus breeder living near Yellow Springs, Ohio, sent an extra good Angus calf to the University last week.

Professor Decker and E. D. Holl will attend the National Dairy Farmers' convention, to be held in Chicago the 22nd to 24th of February, inclusive.

So far two indoor track meets have been arranged for. Indiana will come here on March 10, and Oberlin the following week. Oberlin will be met outdoors, May 19, at Oberlin.

On February 14, E. S. Guthrie attended the farmers' institute at West Manchester, where he gave a very instructive address. The following week he will attend the National Creamery Butter-Makers' Association, to be held at Chicago. The first sessions of this meeting will be devoted to papers and discussions relating to pure food.

Agricultural Notes

The total value of animals on farms is estimated at \$3,600,000,000. According to the same source from which these figures were derived, this is an increase of \$300,000,000 over the preceding year. Every branch of animal husbandry shows wonderful gains, especially is this true of horses. The figures indicate that the general price tendency is upward, with the possible exception of beef cattle, which show an average price very much the same as a year ago.

The warm weather of January, followed by a temperature from 40 to 50 degrees lower, has caused much apprehension in fruit districts. In many sections north of the Ohio River, buds had started and many fear that the fruit crop has been damaged. The weather has also been severe on winter wheat, but it is still too early to determine whether or not much injury has been done.

"Profitable Stock Feeding" is the title of a new book by H. B. Smith, Professor of Animal Husbandry at the University of Nebraska. This book is written for practical feeders, for farmers or for students. Professor Smith was formerly a graduate student in Animal Husbandry at the Wisconsin University, and later a teacher of this subject at the University of Mississippi.

It has been found that electricity will promote the generation of seed. The Massachusetts Agricultural College has been experimenting along this line, and very interesting results have been obtained. In a collection of seed treated 24 hours, 30 per cent. more generated under the current than in lots untreated. While it may be some time before practical use can be made of electricity in this respect, the field offers great possibilities if pursued persistently and intelligently.

Alumni Notes

Otto E. Jennings, B. Sc. (Agr.), '03, who was assistant in the Botanical Department, O. S. U., during his last two years in college, is now acting as Collecting Custodian of the Botanical Collection of the Carnegie Museum. Mr. Jennings' present address is 419 Craft avenue, Carnegie Museum Annex, Pittsburgh, Pa.

J. H. Jefferson, short course, is farming near Madison Mills, Ohio.

Gotfried Jossi, dairy course of '02, is located at Garfield, Ohio, where he is running a Swiss cheese plant.

Lloyd Jones, B. Sc. (Agr.), '03, on graduating at O. S. U., went south to Tuskegee Institute, Alabama, and is now employed as instructor in that institution.

Guy H. Inskeep, ex '05, is running a farm near East Liberty, Ohio.

Frederick S. Johnston, B. Sc. (Agr.), '99, is Professor of Agriculture at College Station, Texas, and also Agriculturalist at the Texas Experiment Station.

Garnett January, ex '07, whose present address is Sabina, Ohio, is running a stock farm near that place.

Marion Imes, B. Sc. (Agr.), '99, and D. V. M. (O. S. U.), '00, is in the employ of the U. S. Meat Inspection Bureau at Albuquerque, New Mexico, 22 Armijo Building.

R. L. Hyde, ex '05, who, after leaving the University and later graduating from the Bliss Business College of this city, located in Frankfort, Ohio, where he is superintending the tillage of several hundred acres of land near that town.

W. C. Jackson, dairy course of '99, is manager of the Hudson Valley Dairy Co. of New Kingston, N. Y.

J. L. Jones is running a farm near Wellington, Ohio, R. R. No. 3.

Arthur M. Irwin, short course, class of '03, is located at Chapin, Iowa, where he is farming.

Sherman Hood, B. Sc. (H. and F.), '94, has been for some time running a truck farm near Mineral Ridge, Ohio.

Herbert Huddleson, ex '05, is employed as clerk in a grain office in Cleveland.

Fred Estle, ex '05, who attended the University almost two years, but was forced to leave on account of weak eyes, is now running a farm of over two hundred acres near Springfield, Ohio. We understand that Mr. Estle's eyesight has improved, as he has lately seen fit to turn benedict.

Charles Nicholson, ex '96, owns a farm of over 400 acres which he is farming together with about 1,200 more of the most fertile land in Clarke and Madison counties. Mr. Nicholson is a careful feeder, almost always buying his stock at a low figure and finishing them as prime stuff.

In a single day last spring he shipped from his farm \$12,000 worth of live stock.

The return game with the Ohio Northern girls' basketball team was played February 3 in the O. S. U. gymnasium. It was a hotly contested game throughout, the reason probably being that the Ada girls were victorious over Ohio State a few weeks ago, and this was a chance to even up old scores.

In the game between the Otterbein girls and the Ohio State girls, held on the evening of February 7, the home team was successful, the score being 12 to 5.

The concert to be given by the Girls' Glee club, on March 2, bids fair to eclipse any other concert heretofore given. Assisting in this performance will be the Mens' Glee club and the Mandolin club.

Ira Condit, B. Sc. (Agr.), '05, former florist at O. S. U., is now employed in the Bureau of Plant Industry, Agricultural Department, Washington, D. C.

Archie O. Newcomb, ex '04, and Sheldon W. Newcomb, ex '00, are located at Boardman, where they ship milk to the Cleveland market. We are glad to hear, from people who have visited the Newcomb farm, that the boys are running a good, consistent business.

D. A. Richards, ex '03 (O. S. U.), D. D. S. (W. R. U.), is now practising dentistry in the city of Cleveland.

Fred D. McMillan, ex '04, is a cheesemaker at Medina, Ohio, R. R. No. 2.

Charles E. Dickerman, ex '06, whose address is Mallot Creek, R. F. D. No. 2, is a breeder and exhibitor of pure-bred Jersey cattle.

J. A. Underhill, ex '08, has identified himself as an expert butter-maker, having won first prize at the Ohio State Fair, 1905, in creamery butter. He lives at Lester, Ohio.

Arthur Parson, who was on the track team and catcher for the Agriculture baseball team last year, is now with his brother, John Parson, running a dairy farm near Rootstown, Ohio.

J. F. Hudson, ex '04, is managing a creamery at Windham, Ohio. Mr. Hudson is also engaged in building up quite a fine herd of pure-bred Guernsey cattle.

UNITED STATES DEPARTMENT OF AGRICULTURE

Grazing Fees on Reserves Upheld

The policy of charging fees for live stock pastured on the forest reserves having been upheld by the sentiment of a majority of the stockmen using the reserves, and having been approved by the President, the efforts of the Forest Service are now directed toward rendering the grazing privileges so secured by permit of the fullest value to the user consistent with the permanent good of the reserves.

Since the first grazing regulations were issued by the Secretary of Agriculture on July 1 last the Forest Service has attentively watched their workings in practice. It became evident that they would need certain modifications to assure to stockmen a more equitable use of the range without in the least loosening those essential restrictions upon which the very existence of the live stock industry depends. From the first, the main body of the grazing interests quickly grasped the advantages of grazing under a system of regulation, and justly appreciated the fairness of a reasonable charge which would secure both the grazing privilege and a permanent use of the range. Naturally enough, the terms of the grazing regulations have called forth discussion and suggestion, but, with the exception of Colorado, protests have been received from no graz-

ing State calling for more than the amendment of certain of the restrictions under which the grazing privilege was to be paid for. The protest of Colorado grazing interests against the payment of any grazing fee whatever led to the conference held on December 1 at Glenwood Springs, at which representatives of local associations of live stock owners conferred with the Forester. Certain concessions for which the experience of the Forest Service with the new regulations had paved the way were then agreed to by the Forester. These concessions will be included in the revised edition of the grazing regulations which the Secretary of Agriculture will issue on January 1, when the charge for grazing permits will go into effect as planned.

Among the new regulations to go in force on January 1 are these:

Regulation 14 provides for the construction and maintenance of drift or division fences, under certain conditions, without charge other than the regular grazing fee.

Regulation 17 has been amended so as to provide that "Whenever any stock is removed before the expiration of the permit, it can be replaced by other stock to fill out the number covered by the permit, if the nearest forest officer is notified at once of such action." This amendment is designed to give permit holders the full use of their permits.

Regulation 21 is amended so that all stock will be required to conform not only to the quarantine regulations of the Bureau of Animal Industry, as heretofore, but to all live stock laws of the State or Territory in which the reserve is located. Rangers will immediately report any violation of the live stock laws, and will assist stockmen to protect their property against theft.

Regulation 22 is amended so as to allow more freedom in the use of private lands owned or leased within reserves by stockmen whose stock must cross reserve lands to reach such holdings.

The amendment to Regulation 24 defines more specifically the privileges allowed in the construction and maintenance of pastures, and provides that "The agreement for the privilege granted under Regulations 14 or 24 may

be made to cover a period of from one to five years, provided it stipulates that failure to secure a renewal of the grazing permit in connection with which it is granted will cancel the agreement for the maintenance of the drift or division fence, or pasture.

A special concessioon was also made in grazing permits on cattle for the season of 1906, in order to protect and assist home builders by giving a half rate on cattle up to the number allowed in the highest permit of the lower half of all permits issued in each State or Territory. The limit, based on permits issued during 1905, is found to be as follows.

State or Territory.	Half-rate limit.
Arizona	75
California	50
Colorado	60
Idaho	30
Kansas	50
Montana	60
Nebraska	50
New Mexico	30
Oklahoma	50
Oregon	30
South Dakota	30
Utah	30
Washington	30
Wyoming	100

Clay, Robinson & Co.'s Calendar

This paper has been favored by Clay, Robinson & Co., the well known live stock commission firm, with their unique and very attractive calendar for 1906. This is something out of the ordinary run of commercial calendars, comprising a set of six spirited hunting pictures(one on a leaf, beautifully lithographed in several colors, the six leaves tied together with a silk cord. Doubtless our readers would like to know how to secure one of these useful and artistic souvenirs. Clay, Robinson & Co. inform us that they will send one free to any reader of this paper who feeds or ships one or more cars of cattle, hogs or sheep during the year. Simply write said firm, addressing their Chicago office, as follows: "Clay, Robinson & Co., Union Stock Yards, Chicago," stating how many head of the above classes of stock you own, about when you expect to make your next shipment, and to what market you usually send your stock, and the calendar will be immediately mailed you.

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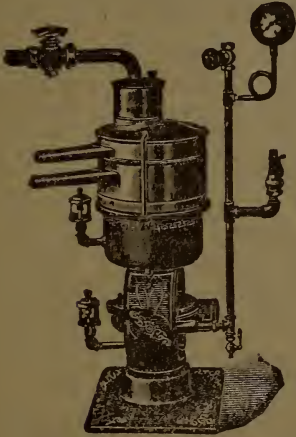
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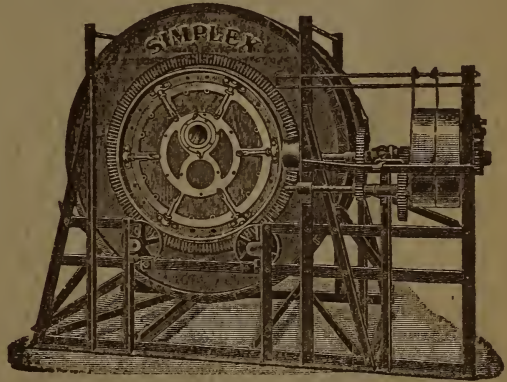
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